

CLAIMS

What is claimed is:

- 1 1. A method for scanning data, comprising:
  - 2 a) executing scanning control logic utilizing a central processing unit;
  - 3 b) identifying a request related to data at the central processing unit;
  - 4 c) indicating the data to a scanning co-processor coupled to the central  
5 processing unit so that the data is scanned by the scanning co-processor  
6 under the control of the scanning control logic;
  - 7 d) waiting for results from the scanning co-processor;
  - 8 e) executing additional logic utilizing the central processing unit while waiting  
9 for the results from the scanning co-processor; and
  - 10 f) initiating an event based on the results from the scanning co-processor.
- 1 2. The method as recited in claim 1, and further comprising processing the data  
2 utilizing the central processing unit upon the receipt of favorable results from  
3 the scanning co-processor.
- 1 3. The method as recited in claim 1, wherein the central processing unit is  
2 coupled to the scanning co-processor via a bus.
- 1 4. The method as recited in claim 1, wherein the scanning control logic includes  
2 hardware.
- 1 5. The method as recited in claim 3, wherein the scanning control logic is stored  
2 on the scanning co-processor.

- 1 6. The method as recited in claim 1, wherein the scanning control logic includes  
2 software.
- 1 7. The method as recited in claim 6, wherein the scanning control logic is stored  
2 in memory.
- 1 8. The method as recited in claim 1, wherein the event is initiated under the  
2 control of the scanning control logic.
- 1 9. The method as recited in claim 1, wherein the scanning co-processor  
2 performs content scanning.
- 1 10. The method as recited in claim 1, wherein the scanning co-processor  
2 performs virus scanning.
- 1 11. The method as recited in claim 1, wherein the scanning co-processor includes  
2 memory.
- 1 12. The method as recited in claim 11, wherein virus signatures are stored in the  
2 memory.
- 1 13. The method as recited in claim 11, wherein rule sets are stored in the  
2 memory.
- 1 14. The method as recited in claim 1, and further comprising determining  
2 whether the data meets a predetermined criteria.
- 1 15. The method as recited in claim 14, wherein the data is sent to the scanning  
2 co-processor if it is determined that the data is meets the predetermined  
3 criteria.

1 16. The method as recited in claim 1, and further comprising queuing additional  
2 data to be scanned by the scanning co-processor while waiting for the results  
3 from the scanning co-processor.

1 17. A computer program product for scanning data, comprising:  
2 a) computer code for executing scanning control logic utilizing a central  
3 processing unit;  
4 b) computer code for identifying a request related to data at the central  
5 processing unit;  
6 c) computer code for indicating the data to a scanning co-processor coupled to  
7 the central processing unit so that the data is scanned by the scanning co-  
8 processor under the control of the scanning control logic;  
9 d) computer code for waiting for results from the scanning co-processor;  
10 e) computer code for executing additional logic utilizing the central processing  
11 unit while waiting for the results from the scanning co-processor; and  
12 f) computer code for initiating an event based on the results from the scanning  
13 co-processor.

1 18. The computer program product as recited in claim 17, and further comprising  
2 computer code for processing the data utilizing the central processing unit  
3 upon the receipt of favorable results from the scanning co-processor.

1 19. The computer program product as recited in claim 17, wherein the central  
2 processing unit is coupled to the scanning co-processor via a bus.

1 20. The computer program product as recited in claim 17, wherein the scanning  
2 control logic includes hardware.

1 21. The computer program product as recited in claim 20, wherein the scanning  
2 control logic is stored on the scanning co-processor.

- 1 22. The computer program product as recited in claim 17, wherein the scanning  
2 control logic includes software.
- 1 23. The computer program product as recited in claim 22, wherein the scanning  
2 control logic is stored in memory.
- 1 24. The computer program product as recited in claim 17, wherein the event is  
2 initiated under the control of the scanning control logic.
- 1 25. The computer program product as recited in claim 17, wherein the scanning  
2 co-processor performs content scanning.
- 1 26. The computer program product as recited in claim 17, wherein the scanning  
2 co-processor performs virus scanning.
- 1 27. The computer program product as recited in claim 17, wherein the scanning  
2 co-processor includes memory.
- 1 28. The computer program product as recited in claim 27, wherein virus  
2 signatures are stored in the memory.
- 1 29. The computer program product as recited in claim 27, wherein rule sets are  
2 stored in the memory.
- 1 30. The computer program product as recited in claim 17, and further comprising  
2 computer code for determining whether the data meets a predetermined  
3 criteria.
- 1 31. The computer program product as recited in claim 30, wherein the data is  
2 sent to the scanning co-processor if it is determined that the data is meets the  
3 predetermined criteria.

1 32. The computer program product as recited in claim 17, and further comprising  
2 computer code for queuing additional data to be scanned by the scanning co-  
3 processor while waiting for the results from the scanning co-processor.

1 33. A system for scanning data, comprising:  
2 a) logic for executing scanning control logic utilizing a central processing unit;  
3 b) logic for identifying a request related to data at the central processing unit;  
4 c) logic for indicating the data to a scanning co-processor coupled to the central  
5 processing unit so that the data is scanned by the scanning co-processor  
6 under the control of the scanning control logic;  
7 d) logic for waiting for results from the scanning co-processor;  
8 e) logic for executing additional logic utilizing the central processing unit while  
9 waiting for the results from the scanning co-processor; and  
10 f) logic for initiating an event based on the results from the scanning co-  
11 processor.

1 34. A method for scanning data, comprising:  
2 a) executing scanning control logic utilizing a central processing unit;  
3 b) identifying a request related to data at the central processing unit;  
4 c) determining whether the data meets a predetermined criteria utilizing the  
5 central processing unit under the control of the scanning control logic;  
6 d) indicating the data to a scanning co-processor coupled to the central  
7 processing unit if it is determined that the data meets the predetermined  
8 criteria;  
9 e) collecting scanning information from memory on the scanning co-processor;  
10 f) scanning the data with the scanning co-processor utilizing the scanning  
11 information under the control of the scanning control logic;  
12 g) waiting for results from the scanning co-processor;  
13 h) executing additional logic utilizing the central processing unit while waiting  
14 for the results from the scanning co-processor;

- 15 i) queuing additional data to be scanned by the scanning co-processor while
- 16 waiting for the results from the scanning co-processor;
- 17 j) initiating a security event upon the receipt of unfavorable results from the
- 18 scanning co-processor; and
- 19 k) processing the data utilizing the central processing unit upon the receipt of
- 20 favorable results from the scanning co-processor.

- 1 35. A system for scanning data, comprising:
- 2 a) means for executing scanning control logic utilizing a central processing
- 3 unit;
- 4 b) means for identifying a request related to data at the central processing unit;
- 5 c) means for determining whether the data meets a predetermined criteria
- 6 utilizing the central processing unit under the control of the scanning control
- 7 logic;
- 8 d) means for indicating the data to a scanning co-processor coupled to the
- 9 central processing unit if it is determined that the data meets the
- 10 predetermined criteria;
- 11 e) means for collecting scanning information from memory on the scanning co-
- 12 processor;
- 13 f) means for scanning the data with the scanning co-processor utilizing the
- 14 scanning information under the control of the scanning control logic;
- 15 g) means for waiting for results from the scanning co-processor;
- 16 h) means for executing additional logic utilizing the central processing unit
- 17 while waiting for the results from the scanning co-processor;
- 18 i) means for queuing additional data to be scanned by the scanning co-
- 19 processor while waiting for the results from the scanning co-processor;
- 20 j) means for initiating a security event upon the receipt of unfavorable results
- 21 from the scanning co-processor; and
- 22 k) means for processing the data utilizing the central processing unit upon the
- 23 receipt of favorable results from the scanning co-processor.

1 36. The system as recited in claim 35, wherein the scanning information is  
2 updated via a network periodically.

1 37. The system as recited in claim 35, wherein the additional logic to be  
2 executed and the additional data queued to be scanned are handled utilizing  
3 multi-threading algorithms.

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